EXHIBIT 6

Exhibit 5

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SimpleAir, Inc.,	CASE NO. 2:11-cv-416-MHS
Plaintiff,	**JURY DEMANDED**
vs.	
Microsoft Corporation, et al.,	
Defendants.	

Declaration of James Knox, Ph.D.
Submitted in Support of Plaintiff SimpleAir's Opening Claim Construction Brief

I, Dr. James Knox, declare as follows:

1.   I have been retained by counsel for SimpleAir to provide expert analysis and

opinions relating to the SimpleAir patents asserted in this case: U.S. Patent Nos. 7,035,914 (the

'914 patent) and 6,021,433 (the '433 patent), both titled "System and Method for Transmission

of Data."[1] I previously submitted a declaration concerning the proper construction of several

claim terms from these patents in SimpleAir's prior case against Apple and RIM.[2] I have been

asked by counsel for provide this further declaration to address certain of the claim construction

disputes at issue in the current case against Microsoft and others. Below, I provide my opinions

concerning the proper interpretation of the following claim terms and phrases:

- "server" (as used in the term "a central broadcast server")

- "parsing said data with parsers"

- "whether said computing devices are online or offline from a data channel associated

  with each device"

- "receivers"

Qualifications

2.   I am qualified to render opinions regarding data communications, networks and

networking, Internet and online services and technologies, wireless communication systems,

electronics, and computer software. I have over 40 years of professional experience in industry

and academics relating to these subjects, including computer networking and data

communications. I am also familiar with and qualified to render opinions concerning the

technology and inventions described in the '914 and '433 patents. A copy of my resume is

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[1] I am compensated solely for my time working on this case, at the rate of $300 per hour.
My compensation is not in any way dependent upon the opinions I reach or the outcome of this
case or any case event.

[2] *See* dkt. #191-1 (Declaration of James Knox, Ph.D dated 4/20/11) in *SimpleAir v. AWS
Convergence et al.*, case. no. 2:09-cv-00289-MHS (E.D. Tex.).

submitted as Plaintiff's exhibit 6. Below I summarize relevant education and experience.

3. I received a Bachelor's degree in Electrical Engineering from The University of Texas in 1969, a Master's degree in Computer Science from The University of Texas in 1971, and a Ph.D. in Electrical Engineering from The University of Texas in 1978.

4. At The University of Texas, I studied and took courses in areas relating to computer networking and computer communications. I also studied and took numerous courses dealing with data communications, wireless communications, electronics, electronic components, and computer software. In addition, I implemented a number of computer network systems, including broadband and baseband. My work included both the hardware and software designs and implementation. Following the academic work, I have developed, expanded, or implemented a number of military and civilian networks. These include both proprietary and commercial systems, as well as classified military systems.

5. I have taught Electrical Engineering and Computer Science at The University of Texas, including courses involving the design, use, and programming of microprocessors and embedded microprocessor systems. These courses included the techniques for communicating over memory and I/O channels to remote devices, as well as the design and use of localized components such as A/D converters and digital switches, processors, memory, and high-speed data interface circuitry.

6. After graduating from the University of Texas, my work experience in the computer hardware and software design field included the design and implementation of numerous electronic and data communication systems. I have designed microprocessors at the transistor circuit level (including designing algorithmic structures within the microprocessor), and developed and implemented their use in land-based, sea-based, air-based, and deep space applications. I have designed many digital communication networks. I have opined in several

other legal cases involving wired and wireless communication systems and devices, computer

hardware and software, and the Internet, and I been qualified as an expert and testified in court

about such systems.

7. I am currently the owner of a computer technology company called TriSoft,

located in Austin, Texas. TriSoft is involved in the research and development of unique

electronic systems and components. I consult in projects involving data and Internet

communications, to name a very small subset.

8. During my career, I have designed and implemented a variety of communications

systems (both hardware and software), including systems for military, commercial, and security

users, including remote telemetry, computer networking, data communications, operating

systems, and application software.

9. Through my education, experience and training, in academia and industry, I have

expertise in the field of the patents. I am familiar with the knowledge of a person of ordinary

skill in the field of the patents in the 1996 time period. For the purposes of this declaration, I am

of the opinion that a person of ordinary skill in the art with respect to the patents would have a

basic understanding of computers and computer software, wired and wireless data transmission

systems and mechanisms, and the Internet and online services. *See, e.g.,* '433 at 1:15-17 ("The

present invention relates generally to communication systems, and more particularly to both

wired and non-wired data transmission communication system"). I am also of the opinion that

such a person would be familiar with existing and then-developing technologies used to transmit

Internet-based and other content to user computers, as described in the literature of that time

period and used by those researching or working in the field. This would include methods of

"Internet broadcasting," "webcasting," and "push technologies." This person of ordinary skill in

the art would typically be someone with a B.S. degree in Electrical Engineering or Computer

Sciences (or the equivalent) and 3 years of experience in the field of networking and programming. Someone with a BSEE degree would require additional specialization in the computer block of EE (or equivalent).

Approach

10.   My opinions are based on my review of the specifications and claims of the patents and their prosecution histories, technical references and other patents and literature that I believe provide guidance on the state of the art and related vocabulary in the 1996 time frame (even though all such patents and articles post-date the filings of the patents), as well as my education and experience.

Opinions

"*server*"

11.   In the prior case, the Court construed the term "server" in "a central broadcast server" to mean "one or more pieces of computer equipment and the software running on the equipment used to provide services for one or more other computers or computing devices." *Markman* order (9/2/2011) (attached as Plaintiff's exhibit 3) at 16-17. As set forth in my prior declaration (para. 64-72), I believed that construction to be correct and I continue to believe it is correct. I explain further below.

12.   The term "server" is a well understood term in the field of both computers and networking. A server is ordinarily understood to be, and would be interpreted as by one of ordinary skill in the art as, a computer or computer program that provides services for other computers or computing devices. These concepts are universal to the concept of a server – something that serves others – and they are reflected in the Court's construction.

13.   In addition, it is important to note that the "server" is "[1] one or more pieces of computer equipment and [2] the software running on the equipment."

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14.   [1] With respect to the first point, the term "server" (in the singular) itself is often

used to describe more than one item that may be considered "a server." This is particularly true

in the context of a "server" that provides a commercial service, such as a "web server" (which is

ordinarily comprised of multiple machines and the software running on those machines, not just

one physical box of hardware sitting in CNN's data center, for example). One of ordinary skill

in the art would understand that the '433 patent uses the term server consistent with this common

meaning (that is, that "a" server may really be multiple machines – something that is often

known today as a "server farm"), particularly since the patent describes embodiments where the

"central broadcast server" (that is, a *single* central broadcast server) includes a network of

servers. '433 at 7:43-46 ("As is illustrated in FIG. 1, information sources 12, such as the

Internet, on-line services and other information sources, provide data feeds, including real time

data feeds, to a network of servers 33 in the central broadcast server 34" (emphasis added)); '433

at Fig. 1 (central broadcast server 34, comprised of three servers 33).

15.   [2] As to the second point, one of ordinary skill in the art would understand that

the "server" in "a central broadcast server" is comprised of not just hardware but also software.

The "preprocessing" and "parsing" that must be done at the central broadcast server are actions

that are typically carried out by software running on hardware, not the bare hardware. Although

there are certain types of dedicated processors that do not have conventional software, a quick

examination of the complexity of the tasks outlined by the patents involved would quickly

indicate to one skilled in the art that these patents are referring to more conventional computers

with operating systems and application (server) software. I note that this interpretation is

consistent with common technical definitions of "server," such as the following:

- *server:* "3. A computer, or a software package, that provides a specific kind of
  service to allow client software to run on other computers. The term can refer to a
  particular piece of software, such as a WWW server, or to the machine on which the

software is running" *Modern Dictionary of Electronics* (7th ed. 1999), p. 683
(emphasis added)).

- *server:* "A computer in a network shared by multiple users. <u>The term may refer to
both the hardware and software or just the software that performs the service</u>."
McGraw-Hill Computer Desktop Encyclopedia (9th ed. 2001) (emphasis added))

16.   Accordingly, it is my opinion that one of ordinary skill in the art at the time of the

invention would understand the term "server" in "a central broadcast server" to have the meaning

set forth by the Court's prior construction.

"parsing said data with parsers"

17.   I understand that the parties propose the following competing interpretations of

"parsing said data with parsers," as used in claim 1 of the '433 and '914 patents:

SimpleAir's construction	Defendants' constructions
"parsing said data with parsers": using computer software to break or divide data received from an information source into components whose content or format can be analyzed, processed, or acted upon	*parsing said data with parsers corresponding to said [central broadcast server]:* breaking up or dividing information received from an information source using filters that each respectively correspond to the type of information that was received (examples of parsers include stock quote parser, weather parser, lotto parser and mail parser)
	parsing said data with parsers: breaking up or dividing information received from an information source using filters
	parsers corresponding to said [central broadcast server]: filters that each respectively correspond to the type of information that was received (examples of parsers include stock quote parser, weather parser, lotto parser and mail parser)

18.   SimpleAir's proposed construction is the same as the one the Court issued in the

prior case. As set forth in my prior declaration (para. 97-108), I believed that construction to be

correct and I continue to believe it is correct.

the Court's prior construction

19.   The terms "parser" and "parsing" are widely used in the computer software field

to describe a process by which a software program (or a portion of the program, such as a

routine) is used to break up data into components so that those components can more easily be

processed. For example:

parser:

- "The portion of a computer program that carries out parsing operations."
  McGraw-Hill Dictionary of Scientific and Technical Terms, (5th ed. 1994),
  p.1450.

- "A software tool that parses computer programs or other text, often as the first
  step of assembly, compilation, interpretation, or analysis." *IEEE Standard
  Dictionary of Electrical and Electronics Terms* (6th ed. 1996), p.747.

- "An application or device that breaks data into smaller chunks so that an
  application can act on the information. *See also* parse." *Microsoft Computer
  Dictionary* (5th ed. 2002), p. 392] (not found in prior edition, though "parse" is,
  as shown below).

- "A routine that performs parsing operations on a computer or natural language."
  McGraw Hill Computer Desktop Encyclopedia, (9th ed. 2001).

- "A routine or algorithm that performs parsing." *Wiley Electrical and Electronics
  Engineering Dictionary* (2004), p.554.

- "A program that breaks large units of data into smaller, more easily interpreted
  pieces." *Webster's New World Computer Dictionary* (10th ed. 2003), p.274.

parse:

- "To determine the syntactic structure of a language unit by decomposing it into
  more elemental subunits and establishing the relationships among the subunits.
  For example, to decompose blocks into statements, statements into
  expressions, expressions into operators and operands." *IEEE Standard
  Dictionary of Electrical and Electronics Terms* (6th ed. 1996), p.747; *The
  Authoritative Dictionary of IEEE Standards Terms* (7th ed. 2000), p.795 (also
  adding: "(2) To resolve a request or response into component parts. In the
  context of messages, a device can break the message into pieces").

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- *"To break input into smaller chunks so that a program can act upon the information." Microsoft Computer Dictionary* (4th ed. 1999), p. 333; *Microsoft Computer Dictionary* (5th ed. 2002), p.392 (same definition).

- "to divide language into small components that can be analyzed. For example, parsing this sentence would involve dividing it into words and phrases and identifying the type of each component (*e.g.*, verb, adjective, or noun). Parsing is a very important part of many computer science disciplines." *Random House Webster's Computer & Internet Dictionary* (3rd ed. 1999), p.415-416.

- "To analyze a sentence or language statement. Parsing breaks down words into functional units that can be converted into machine language." *McGraw Hill Computer Desktop Encyclopedia* (9th ed. 2001).

- "To break down into components." *Webster's New World Computer Dictionary* (10th ed. 2003), p. 274.

- "1. To examine closely and break down into components. 2. In computers, to analyze and separate into components which are more easily processed, converted, or the like. For example, to parse statements into expressions." *Wiley Electrical and Electronics Engineering Dictionary* (2004), p.554.

20.   In addition, one of ordinary skill in the art would understand the claims of the

'433 and '914 patents to use the terms "parsers" and "parsing said data" consistent with their

ordinary meaning. The claims recite the act of "parsing said data with parsers" ….

"corresponding to the central broadcast server" (in the case of '914 claim 1) or "corresponding to

said servers [*i.e.*, servers within the central broadcast server]." This usage would be understood

to refer to "parsers" as software in the central broadcast server and to refer to the act of using

these parsers for "parsing said data" as using them for their ordinary purpose – to break or divide

that data into components.

response to Defendants

21.   In my opinion, Defendants' proposed constructions for the "parsing" elements are

incorrect for the following reasons.

22.   First, Defendants interpret the term "parsers" to mean "filters." Those two terms

would not be understood to be interchangeable by those of ordinary skill in the art. A parser may

be used as part of a filtering process and one might call such a parser a "filter." However, that particular implementation would not be understood by those of ordinary skill in the art to be required by the term "parser" itself.

23. <u>Second</u>, Defendants' constructions require that the parsers (or "filters," according to Defendants) "each respectively correspond to the type of information that was received (examples of parsers include stock quote parser, weather parser, lotto parser and mail parser"). This construction appears to draw on an embodiment the patent describes in which several content or information specific parsers are used. *See, e.g.*, '433 at 7:67-8:5 ("The data, which can include but is not limited to stock quotes, weather, lotto, E-mail, etc. is then respectively parsed by parsers, such as the stock quote parser 106, weather parser 108, lotto parser 110 and mail parser 112, and then transmitted to the content manager 114 located in the central broadcast server 34"); Fig. 2 (depicting content specific parsers).

24. My understanding, however, is that the claims of a patent are not to be limited to the specific embodiments of the specification – particularly where, as here, the specification cautions against doing so. '433, col. 8:10-11 ("The present invention is not limited to the information sources or parsers described herein"). In addition, in my opinion, one of ordinary skill in the art would not read the claim requirement that the parsers "correspond to said central broadcast server" (as the '914 patent states) or "correspond to said servers [*i.e.*, servers within the central broadcast server]" (as the '433 patent states) to mean the parsers must "correspond *to the type of information that was received*," as Defendants propose. That limitation is simply not conveyed by the claim language, which requires only a correspondence between the parsers and the servers that implement them (the central broadcast server and its constituent servers) not the type of information that is being parsed.

25. Accordingly, it is my opinion that one of ordinary skill in the art at the time of the

invention would understand the phrase "parsing said data with parsers" to have the meaning set forth by the Court's prior construction.

"whether said devices are online or offline from a data channel associated with each device"

26.   I understand that the parties propose the following competing interpretations of the last element of claim 1 of the '914 patent:

SimpleAir's construction	Defendants' constructions
entire phrase: whether the remote computing devices are or are not connected via the Internet or another online service to a data channel associated with each computing device at the time the preprocessed data is received by the receivers. A device is not online to an associated data channel merely because it is able to receive data transmissions (directly or indirectly) from the central broadcast server. *a data channel:* "one or more communication channels or paths for accessing or viewing a category or subcategory of information that is provided by an information source over a communications network."	entire phrase: whether said devices are or are not connected to the Internet (or some other online service) via "a data channel associated with each device" *a data channel:* any path between the remote computing device and the Internet (or some other online service) through which information can flow to or from the remote computing device and that does not include the path between the remote computing device and the attached receiver

27.   SimpleAir's proposed constructions are the same as those the Court issued in the prior case. As set forth in my prior declaration (para. 81-96), I believed those constructions to be correct and I continue to believe they are correct. Below I will walk through the different aspects of the claim element and the Court's construction and then show how they tie together. I will then address Defendants' proposed construction.

the Court's prior construction

"online or offline"

28.   The patent defines the term "offline" to mean "not connected to the Internet or

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some other on-line service." '433 at 6:61-64 ("Another advantage of the present invention is that

a remote computer 14 can receive information instantly even while it is <u>off-line (i.e. not

connected to the Internet or some other on-line service)</u>" (emphasis added)). This definition is

consistent with the ordinary usage of the term "offline" at the time of the invention. In addition,

because "offline" and "online" are opposites, the patent implicitly defines "online" to mean

"connected to the Internet or some other on-line service."

> *"a data channel"*

29.   One of ordinary skill in the art would understand the term "a data channel" to

have the meaning previously adopted by the Court: "one or more communication channels or

paths for accessing or viewing a category or subcategory of information that is provided by an

information source over a communications network." I reach this opinion for the following

reasons.

30.   <u>First</u>, the term "channel," as used in the context of data transmission and

communications, typically refers to a communication channel or path for transmission of

information or data. The transmission can be between two devices or between components

within a device.

- *Channel:* "…(2)(A) A path along which signals can be sent, for example, data channel, output channel…(12)(A) A one-way path for transmission of signals between two or more points; for example, a data channel. *See also:* circuit; link; link. (B) In data transmission, either one-way path, providing transmission in one direction only, or two-way path, providing transmission in two directions. *Synonym:* path…(13)(A) A one-way path for transmission of signals between two or more points; for example, an output channel or a data channel. *Synonym:* line; link; path. *See also:* circuit. (B) The portion of a storage medium that is accessible to a given reading or writing station, such as a track, or a band…(16) *See also:* communication channel." *IEEE Standard Dictionary of Electrical and Electronics Terms* (6th ed. 1996), p.146.

- *Channel:* "*n.* 1. <u>A path or link through which information passes between two devices</u>. A channel can be either internal or external to a microcomputer. *See also*

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bus. 2. In communications, a medium for transferring information. Depending on
its type, a communications channel can carry information (data, sound, and/or
video) in either analog or digital form. A communications channel can be a
physical link, such as the cable connecting two stations in a network, or it can
consist of some electromagnetic transmission on one or more frequencies within a
bandwidth in the electromagnetic spectrum, as in radio and television, or in
optical, microwave, or voice-grade communication. *Also called* circuit, line. *See
also* analog, band, bandwidth, digital (definition 2), electromagnetic spectrum,
frequency." *Microsoft Computer Dictionary* (4th ed. 1999) p.81.

- *Channel:* "…(2) In communications, any pathway between two computers or
  terminals. It may refer to the physical medium, such as coaxial cable, or to a
  specific carrier frequency (subchannel) within a larger channel or wireless
  medium." *McGraw Hill* C*omputer Desktop Encyclopedia*, (9th ed. 2001).

- *Communication channel:* "A facility that permits signaling between terminals."
  IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed. 1996),
  p.182.

31.   The Court's prior construction accords this broad meaning with the phrase "one or

more communication channels or paths."

32.   Second, within this broad meaning of "channel" there is a more specific meaning

of the term in the field of "Internet broadcasting" or "webcasting" (terms used beginning at the

time of the invention to describe methods for transmitting Internet-based content to subscriber

computers). In this field, as explained below, the term "channel" was used to refer to a content

specific communication channel or path used to access or display the "broadcasted" content.

The Court's prior construction also accords this more specific meaning by specifying that the

"one or more communication channels or paths" are "*for accessing or viewing a category or*

subcategory of information that is provided by an information source over a communications

network."

33.   This use of the word "channel" draws on a television channel metaphor. Users of

Internet broadcasting or webcasting services would subscribe to receive certain types of Internet-

based content. When new information was available, the user received a "broadcasted"

notification to tell the user to "tune in" to the relevant channel, which could be accessed by

specialized software on the user's remote computing device that lead them back to the source of

the information. This use of the term "channel" began to be documented shortly after the time of

the invention (1996) and then begins to appear more frequently in patent filings and technical

references. For example:

- "Internet broadcasting effectively turns a computer into a high-tech television set, allowing a client computer to change 'channels' for displaying news, sports scores, stock charts, weather updates and other kinds of information which are downloaded from the Internet. The information displayed for the channels is dynamically updated, such as through scheduled or manually initiated downloads." Exh. 7, U.S. Pat. No. 5,959,621 to Nawaz (filed December 6, 1996 (after the priority dates of the AirMedia patents) and assigned to Microsoft)) at 2:34-41 (emphasis added).

- *Channel:* "(3) Information on a particular subject that is transmitted into the user's computer from a Webcast site via the user's browser or push client. It is the Internet's counterpart of the TV or radio channel. See *Webcast, push, client,* and *push technology.*" *McGraw-Hill Computer Desktop Encyclopedia*, (9th ed. 2001) (emphasis added).

- *Content aggregator*: "2…Content aggregators supply subscribers with client software through which content providers broadcast (push) information via 'channels' that allow users both to choose the kind of information they receive and to decide when they want it updated. Also called: channel aggregator. See also push, webcasting. Compare content provider." *Microsoft Computer Dictionary* (4th ed. 1999), p. 109 (emphasis added).

- "The push model is also known as webcasting…The user, in order to access the channels and have the content 'pushed' to him or her, must download special client software which acts either independently of, or in conjunction with, the user's browser." Exh. 8, U.S. Patent No. 5,987,454 to Hobbs (filed June 9, 1997 (after the priority dates of the AirMedia patents)) at 4:18-30 (underline added);

- "Figure 3 depicts our component model of a push system…The information source provides new data for a specific channel to the broadcaster. The broadcaster…sends the data (in parallel *or iteratively*) to a set of repeaters…The repeaters then redistribute the data to receivers… Every broadcaster can send to multiple channels and every receiver can receive from multiple channels." Exh. 9, *A Component and Communication Model for Push Systems*," Manfred Hauswirth and Mehdi Jazayeri, Distributed Systems Group, Technical University of Vienna (1999)), at page 5 (emphasis added).

- "Push clients are only one side of a client/server process. On the other side of this process, <u>push servers are responsible for sending channels of information to clients</u>. A channel is a preselected Web site. The availability of various channels depends on the push client software…. The content of a channel can be personalized so that the user gets only the information she/he needs." Exh. 10, *Towards an Accessible Web by Applying PUSH Technology*, Tuula Kapyla, Iston Niemi, and Aarno Lehtola, VTT Information Technology (1998))[3] at 2 (emphasis added);

- *Push media:* "In the Internet, a series of new content-delivery mechanisms, in which users subscribe to what amounts to a <u>broadcasting service</u>, which subsequently delivers content to the user's computer without the user having to make further requests for information…Among <u>the various push media models that have been developed are applications…which employ a radio metaphor</u>: <u>The user tunes to a channel, and content is delivered to the user whenever updates are available</u>." *Webster's New World Computer Dictionary* (10th ed. 2003), p. 305 (emphasis added).

34.   <u>Third</u>, one of ordinary skill in the art would recognize that the '914 patent uses the term "data channel" in the sense of an Internet broadcasting channel. The patents are clearly in the field of "Internet broadcasting." *See, e.g.*, '433 Abstract ("Information sources transmit data to a central broadcast server, which preprocesses the data for wireless broadcast"); *id.* at 5:53-55 ("Included with the broadcast that is wirelessly sent to the user is the Internet address and location of the detail of that message"). Moreover, one of ordinary skill in the art would understand the specification to disclose methods that allow users to subscribe to various different channels provided by information sources.

35.   The patent explains that "on-line services and other information sources, provide data feeds, including real time data feeds" to the central broadcast server regarding "electronic mail (E-mail) and other personal alert notifications, news, sports, and financial stories, premium and special event feeds." '433 at 7:44-54. The specification refers to the data feeds as "logical information categories at the central broadcast server 34 end which matches viewers 48 which exist on the user end." *Id.* at 28:2-4. "A user can register and subscribe to receive broadcasts" of

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[3] This article does not list its publication date, but appears to have been presented at the 4th ERCIM Workshop on "User Interfaces for All" held in Stockholm, Sweden on October 19-21, 1998. *See*: http://ui4all.ics.forth.gr/UI4ALL-98/proceedings.html

these data feeds from the central broadcast server, which maintains a "subscriber database…to determine which subscribers receive which types of content." *Id.* at 8:20-25. On the user end, the user is able to specify "preferences at information category or specific content levels" and can even select "subcategories of information within a particular information category." *Id.* at 21:21-32.

36. When data for a particular feed is available, it is "broadcast" to the user's remote computing device, where it is further "broadcast to the preferred viewer via the viewer server" (software on the user's device"). *Id.* at 26-15:17. "Viewers" are described as the special software "by which data received from the broadcast network is displayed to the user," several of which are provided for "each of the different types of information provider over the network." *Id.* at 28:52-54. Examples of viewers shown in Figures 24(a)-(d):
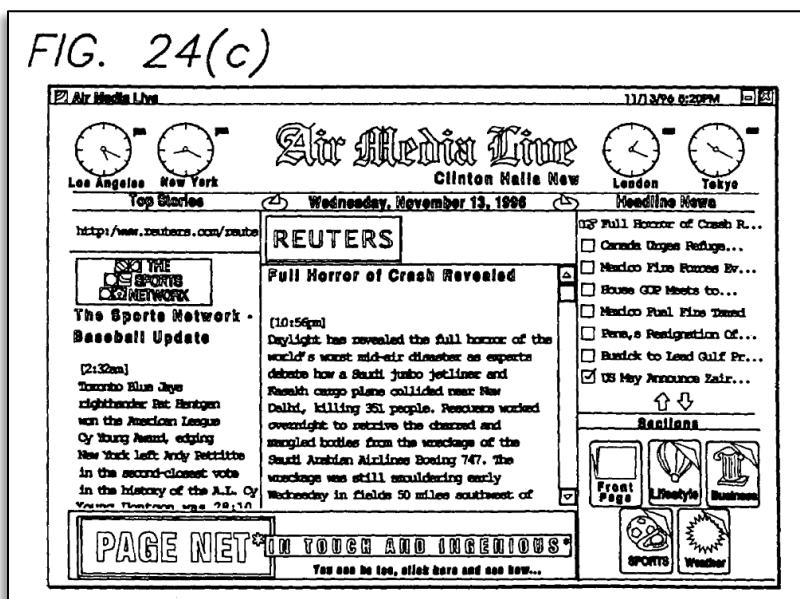
- Market scoreboard viewer:

FIG. 24(a)

- Football viewer:

FIG. 24(b)

- Newspaper viewer:

FIG. 24(c)
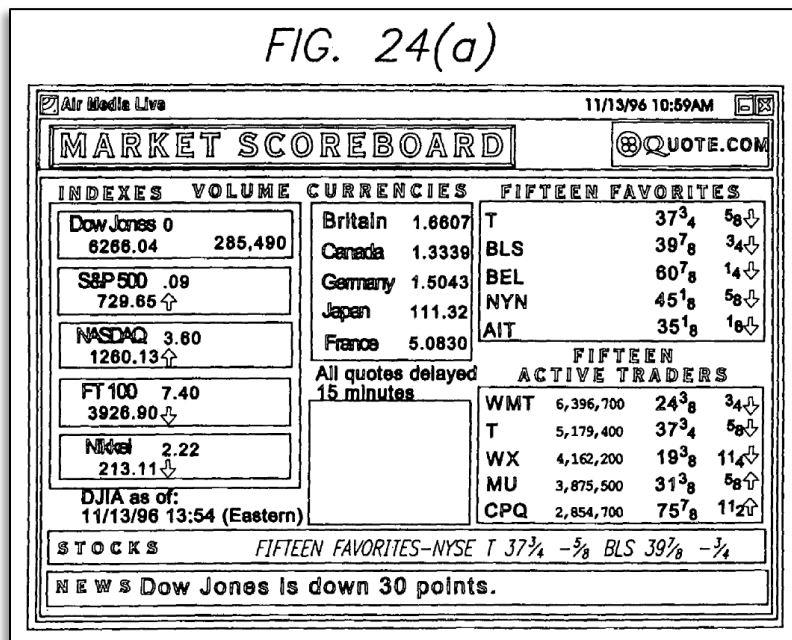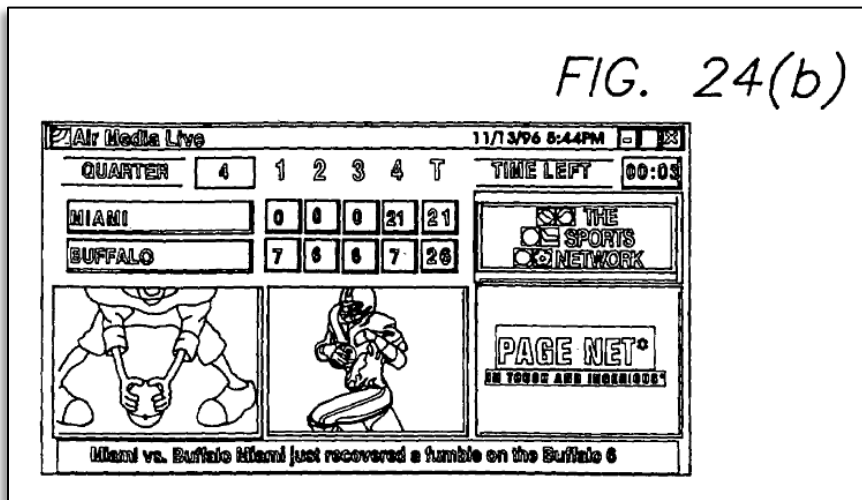
37.   Finally, the patents further draw on the television channel metaphor by disclosing a "remote control" interface on the user's computing device that provides access to various categories of viewers (e.g., "Headline News," "LifeStyle," "Business," "Sports," "Fun and Games," and "Cyberspace") and their corresponding channels.

FIG. 11
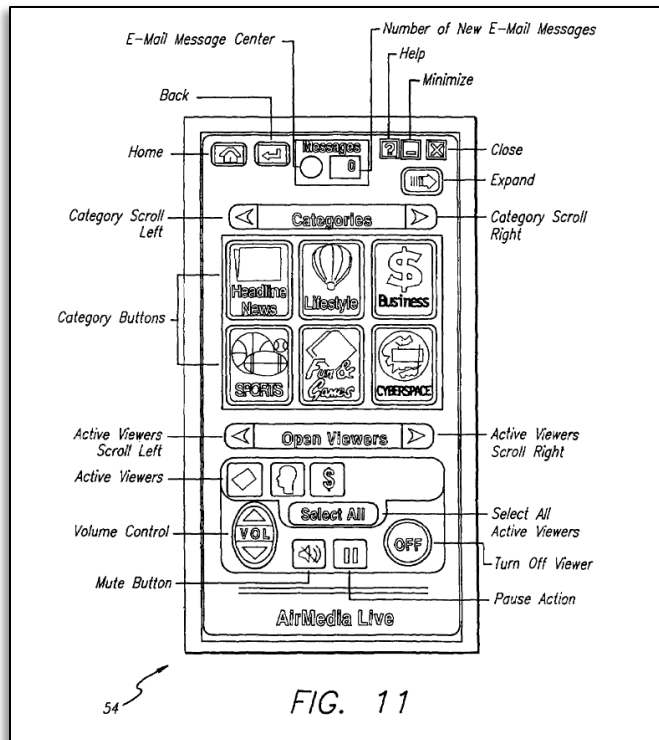
38. <u>Fourth</u>, the claim language that follows the term "a data channel" would further demonstrate to one of ordinary skill in the art that the claimed data channels are "communication channels or paths for accessing or viewing a category or subcategory of information that is provided by an information source over a communications network." As shown above, the entire claim element reads: "whether said devices are online or offline from a data channel <u>associated</u> <u>with each device</u>." (emphasis added). The underlined phrase qualifies what comes before it: "a data channel." One of ordinary skill in the art would understand that the claimed "association" in the context of Internet broadcasting channels. The one or more data channels are "associated with each device" that receives the preprocessed data in that each of those devices belongs to a user that has subscribed to the particular channel the information relates to and has specialized software that corresponds to that data channel. For example, a headline news channel is associated with a remote computing device if that device has a particular viewer corresponding to that channel that allows the user to view the transmitted data and access additional data from

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the information source providing that channel:

- "Wirelessly transmitted URL's 22, associated with incoming information, are embedded in the broadcast message from the central broadcast server 34, which is displayed in the multimedia viewers 20 and provide an automated direct wired or wireless line connection 22 back to the information source 12 such that detailed data may be automatically downloaded to the user's computer 14"; '433 at 12:7-14

- "There are separate viewers for each of the different types of information provided over the network;" *id.* at 28:55-56;

- "In a typical configuration, approximately thirty viewers 48 are available and the user interface alert panel 50 determines which viewer 48 will be able to read the information." *Id.* at 25:46-49.

39.   Accordingly, it is my opinion that one of ordinary skill in the art at the time of the invention would understand the term "a data channel" to have the meaning set forth by the Court's prior construction.

"whether said devices are online or offline from a data channel associated with each device"

40.   As mentioned above, the Court construed the entire claim phrase to mean: "[1] whether the remote computing devices are or are not connected via the Internet or another online service to a data channel associated with each computing device [2] at the time the preprocessed data is received by the receivers." In my opinion, both aspects of this construction are correct.

41.   [1] With respect to the first part of the Court's construction, the phrase "connected via the Internet or another online service" tracks the patent's definition of "offline" as "not connected to the Internet or some other online service."

42.   [2] With respect to the second part, this merely clarifies that what is relevant is whether the remote devices are online or offline from a data channel when the preprocessed data is received by the receivers (*i.e.*, it is not relevant whether the remote devices happen to be online to a data channel at an earlier or later time).

43.   The Court also added the following clarification to its construction: "A device

is not online to an associated data channel merely because it is able to receive data

transmissions (directly or indirectly) from the central broadcast server." I also agree with

this aspect of the Court's construction. One of ordinary skill in the art would understand, as

the Court noted, that any other interpretation would not make sense. *Markman* at 37 ("As

Plaintiff points out, the mere ability of a computing device to receive transmissions from the

central broadcast server (whether directly or indirectly via a receiver) cannot mean that the

computing device is "online to a data channel," because that would render the "instantaneous

notification" of both online and offline devices nonsensical").

Response to Defendants

44.   As shown above, Defendants propose the following constructions for the final

element of '914 Claim 1:

Defendants' constructions
entire phrase: whether said devices are or are not connected to the Internet (or some other online service) via "a data channel associated with each device"
a data channel: any path between the remote computing device and the Internet (or some other online service) through which information can flow to or from the remote computing device and that does not include the path between the remote computing device and the attached receiver

45.   In my opinion, one of ordinary skill in the art would not interpret the claim

language to have the meaning proposed by Defendants.

46.   First, Defendants' construction of "a data channel" does not accord the relevant

meaning of the claim term. As explained above, the '914 patent uses "data channel" according

to its more specific meaning in the field of the invention. Defendants' proposed construction

draws on a broad sense of the term "data channel" that is not tied to the context of the '914

patent. In addition, Defendants' construction does not appear to give any meaning to the phrase

"associated with each device." If the claimed "data channel" were simply "any path between the

remote computing device and the Internet," it is unclear how that that data channel would be

"associated with" the remote computing device whether the device is "online or offline from"

that channel.

47.   Second, Defendants' construction of the entire phrase is also incorrect. When

their proposed construction of "data channel" is incorporated in their construction for the entire

phrase, the following phrase results: "instantaneously notification said devices of receipt of said

preprocessed data whether [1] said devices are or are not connected to the Internet (or some other

online service) [2] via any path between the remote computing device and the Internet." This

proposal effectively deletes the "data channel" limitation from the claim. There is no difference

between specifying that [1] a device is "connected to the Internet" and specifying that [2] a

device is "connected to the Internet…via a path between the device and the Internet." The

underlined language is necessarily required by the first phrase because that is how a remote

computing device connects to the Internet – via a path between the device and the Internet.

48.   To put it another way, under Defendants' construction, the determination of

whether a device is "online or offline from a data channel associated with each device" is no

different from the determination of whether the device is simply "online or offline" (*i.e.*,

connected to the Internet). In both cases, according to Defendants, this determination depends

only on whether the device is connected to the Internet.[4]

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[4] In the prior case, Defendants made a similar argument the Court ruled against. *Markman* at 34 ("According to Defendants, these specification statements, as well as others, confirm that the "associated data channel" of the computing device is a "network connection" between the computing device and the Internet online services. Defendants, however, are incorrect. At most, these statements establish that the "data channel" is a communication channel or path over a network – not a connection to a network"). In my opinion, the Court's previous

49.   Third, Defendants' proposed construction refers to "the path between the remote computing device and the attached receiver." This appears reference appears to rely upon Defendants' construction of the term "receivers" to mean "a device attached to the remote computing device for receiving said preprocessed data even when said remote computing device is not connected to the Internet (or some other online service)." As explained below, I believe that construction is incorrect.

50.   Accordingly, it is my opinion that one of ordinary skill in the art at the time of the invention would understand the phrase "whether said computing devices are online or offline from a data channel associated with each device" to have the meaning set forth by the Court's prior constructions.

"receivers"

51.   As mentioned above, I understand that Defendants propose the following construction for the term "receivers" in the phrase "transmitting preprocessed data to receivers communicating with said devices" (which is found in Claim 1 of both patents):

Defendants' construction
Receivers: a device attached to the remote computing device for receiving said preprocessed data even when said remote computing device is not connected to the Internet (or some other online service)

52.   In my opinion, the term "receivers" does not require further construction and it certainly is not limited to what the Defendants propose.

53.   First, Defendants' construction – in using the phrase "attached to the remote computing device" – incorrectly suggests the "remote computing device" and the "receivers" must be entirely separate from each other such that they could not form part of the same device

ruling accords with the understanding of one of ordinary skill in the art and is therefore correct.

or machine. The preferred embodiment does depict the remote computing device as a user's PC and the receiver as a separate wireless paging receiver that is attached to the device by a serial cord. However, the claims merely require "receivers communicating with said devices" and do not impose any restriction on whether the receiver and the remote computing device are or are not part of the same machine or device.

54.   In addition, I note that the specification expressly teaches that the remote computing device and the receivers can be part of the same overall device or product. For example, the specification explains:

- "Although the present invention may be used to interact wirelessly with any computing device, for illustrative purposes, the present invention will be described and illustrated utilizing a personal computer 14. One skilled in the art will recognize that computing devices may include consumer electronic devices including computing capabilities." '433, col. 5:27-32 (emphasis added).

- "One skilled in the art will recognize that the present invention is not limited to the particular configuration discussed above. Rather, the present invention may be implemented on other computer systems and configurations, including but not limited to Macintosh or Unix computers, televisions, telephones, appliances and so forth." '433, col. 7:30-36 (emphasis added).

55.   One of ordinary skill in the art would understand these statements as explaining that the invention can be implemented in many different ways, including by transmitting data to machine that includes both a computing device and a receiving device (such as a telephone or television).

56.   Second, Defendants' proposed construction states that the receiver is "for receiving said preprocessed data even when said remote computing device is not connected to the Internet (or some other online service)." This requirement is not found in the ordinary meaning of "receiver." Moreover, this requirement seems to depend on Defendants' incorrect interpretation of the "online or offline from a data channel" element, which I addressed above.
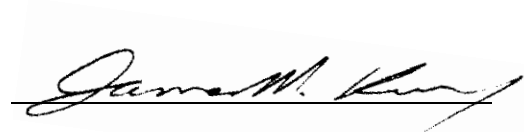
57.   Accordingly, in my opinion, one of ordinary skill in the art would not interpret the term "receivers" to have the meaning Defendants propose but would instead understand this term, in light of the specification, to merely require a component or device that receives information. Moreover, because that is the ordinary meaning of the term "receiver" in this context, I agree with SimpleAir that no construction of the term is necessary.

Conclusion

58.   I understand that Defendants will be submitting a claim construction brief and may also submit a declaration from their own expert. In the event that happens, I understand that I may be asked to supplement the above opinions or provided additional analysis in response.

I, James Knox, declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

This declaration was executed on December 17, 2012.

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James Knox, Ph.D.